



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706-1255 • (208) 373-0502

Dirk Kempthorne, Governor
C. Stephen Allred, Director

December 10, 2002

Certified Mail No. 7000 0520 0016 0850 9054

Gary Bremer, President
Foam Molders Inc.
5548 N. McGuire Road
Post Falls, ID 83854

RE: AIRS Facility No. 055-00047, Foam Molders Inc., Post Falls
Final Tier II Operating Permit and Permit to Construct

Dear Mr. Bremer:

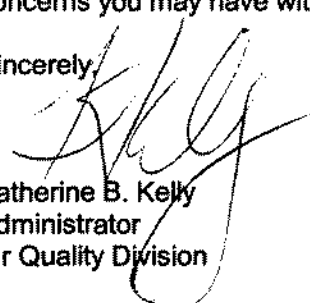
The Department of Environmental Quality (Department) is issuing Tier II Operating Permit and Permit to Construct No. 055-00047 to Foam Molders Inc. in accordance with the *Rules for the Control of Air Pollution in Idaho*, IDAPA 58.01.01.400 - 470 and 58.01.01.200 - 228, respectively.

The enclosed permit is effective immediately and is based on the information contained in your permit application and all relevant comments received during the public comment period.

Tom Harman of the Coeur d'Alene Regional Office will contact you regarding a meeting to discuss the permit terms and requirements. The Department recommends the following representatives attend the meeting: your facility's plant manager, responsible official, environmental contact, and any operations staff responsible for day-to-day compliance with permit conditions.

Pursuant to IDAPA 58.01.23, you, as well as any other entity, may have the right to appeal this final agency action within 35 days of the date of this decision. However, prior to filing a petition for a contested case, I encourage you to call Mike Simon at (208) 373-0502 to address any questions or concerns you may have with the enclosed permit.

Sincerely,



Katherine B. Kelly
Administrator
Air Quality Division

MS/CZ/sm Project No. T2-020105 G:\Air Quality\Stationary Source\SS Ltd\T2\Foam Molders\Final\T2-020105 FM Final Ltr.doc

Enclosure

cc: Tom Harman, Coeur d'Alene Regional Office
Laurie Kral, EPA Region 10



**Air Quality
TIER II OPERATING PERMIT
and
PERMIT TO CONSTRUCT**

**State of Idaho
Department of Environmental Quality**

PERMIT NO.: 055-00047

AQCR: 62

CLASS: SM

SIC: 3086

ZONE: 11

UTM COORDINATE (km): 501.5, 5288.5

1. PERMITTEE

Foam Molders, Inc.

2. PROJECT

Tier II operating permit and permit to construct modification

3. MAILING ADDRESS

5548 N. McGuire Road

CITY

Post Falls

STATE

ID

ZIP

83854

4. FACILITY CONTACT

Gary Bremer

TITLE

President

TELEPHONE

(208) 777-8485

5. RESPONSIBLE OFFICIAL

Gary Bremer

TITLE

President

TELEPHONE

(208) 777-8485

6. EXACT PLANT LOCATION

5548 N. McGuire Road, Post Falls, Idaho

COUNTY

Kootenai

7. GENERAL NATURE OF BUSINESS & KINDS OF PRODUCTS

Expanded plastic foam products

8. PERMIT AUTHORITY

This permit to construct and Tier II operating permit is issued according to the *Rules for the Control of Air Pollution in Idaho*, IDAPA 58.01.01.200-228 and IDAPA 58.01.01.400-470, respectively. This permit pertains only to emissions of air contaminants regulated by the state of Idaho and to the sources specifically allowed to be operated by this permit. Only the terms and conditions pertaining to Tier II operating permit requirements are subject to the expiration date of this permit.

This permit is not transferable to another person, place, or piece or set of equipment and will expire if construction has not begun within two years of its issue date or if construction is suspended for one year.

This permit has been granted on the basis of design information presented in the application and the Idaho Department of Environmental Quality's technical analysis of the supplied information. Changes in design or equipment that result in any change in the nature or amount of emissions may be considered a modification. Modifications are subject to Department review in accordance with IDAPA 58.01.01.200.


KATHERINE B. KELLY, ADMINISTRATOR, AIR QUALITY DIVISION
DEPARTMENT OF ENVIRONMENTAL QUALITY

DATE ISSUED: December 10, 2002

DATE EXPIRES: December 10, 2007

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ACRONYMS, UNITS, and CHEMICAL NOMENCLATURE

AQCR	Air Quality Control Region
CFR	Code of Federal Regulations
CO	carbon monoxide
Department	Department of Environmental Quality
dscf	dry standard cubic feet (foot)
EPA	Environmental Protection Agency
EPS	Expandable polystyrene
gr	grain (1 lb = 7,000 grains)
IDAPA	A numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
km	Kilometer
lb/day	pounds per day
lb/hr	pounds per hour
lb EPS bead/hr	pounds of EPA bead per hour
MMBtu/hr	million British thermal units per hour
NO _x	nitrogen oxides
PM ₁₀	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
SIC	Standard Industrial Classification
SO ₂	sulfur dioxide
T/yr	tons per year
UTM	Universal Transverse Mercator
VOC	volatile organic compound

AIR QUALITY TIER II OPERATING AND PERMIT TO CONSTRUCT No.: 055-00047

Permittee: Foam Molders, Inc.
Location: Post Falls, Idaho

Date Issued: December 10, 2002
Date Expires: December 10, 2007

1. PERMIT SCOPE**Purpose**

The primary purpose of this permit is to limit facility emissions below Title V permitting thresholds. In addition, this permit does the following:

- 1.1 This Tier II operating permit includes a new permit to construct for the installation of a pre-expander and block mold which increased the expandable polystyrene (EPS) throughput limit and the VOC emission rate limit.
- 1.2 This permit incorporates and replaces Tier II Permit No. 055-00047, issued September 26, 2000.

Regulated Sources

- 1.3 Table 1.1 lists all sources of emissions regulated in this permit.

Table 1.1 SUMMARY OF REGULATED SOURCES

Permit Sections	Source Description	Emissions Control(s)
2	<u>Boiler (A)</u> Manufacturer: Superior Model: 6-750 Rated heat capacity: 6.3 MMBtu/hr Burner type: Horizontally fired Stack diameter: 14 inches Stack height: 32 feet Fuel: Natural gas	None
3	Pre-expander (H) Manufacturer: Dae Kong Machine Co. Model: DKE-3600SP Maximum hourly process rate: 3,600 lb EPS bead/hr Stack diameter: 4 inches Stack height: 33.5 feet	None
3	Prepuff storage	None
3	Block mold	None
3	Product storage	None

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2. FACILITY-WIDE CONDITIONS

Fugitive Emissions

- 2.1 All reasonable precautions shall be taken to prevent particulate matter from becoming airborne in accordance with IDAPA 58.01.01.650-651. In determining what is reasonable, considerations will be given to factors such as the proximity of dust-emitting operations to human habitations and activities and atmospheric conditions that might affect the movement of particulate matter. Some of the reasonable precautions include, but are not limited to, the following:
- Use, where practical, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of lands.
 - Application, where practical, of asphalt, oil, water, or suitable chemicals to, or covering of dirt roads, material stockpiles, and other surfaces which can create dust.
 - Installation and use, where practical, of hoods, fans and fabric filters, or equivalent systems to enclose and vent the handling of dusty materials. Adequate containment methods should be employed during sandblasting or other operations.
 - Covering, where practical, of open-bodied trucks transporting materials likely to give rise to airborne dusts.
 - Paving of roadways and their maintenance in a clean condition, where practical.
 - Prompt removal of earth or other stored material from streets, where practical.
- [IDAPA 58.01.01.650-651, 5/1/94]
- 2.2 Unless specified elsewhere in this permit, the permittee shall monitor and maintain records of the frequency and the method(s) used (i.e., water, chemical dust suppressants, etc.) to reasonably control fugitive emissions.
- [IDAPA 58.01.01.405.01, 5/1/94]
- 2.3 Unless specified elsewhere in this permit, the permittee shall maintain records of all fugitive dust complaints received. The permittee shall take appropriate corrective action as expeditiously as practicable after receipt of a valid complaint. The records shall include, at a minimum, the date each complaint was received and a description of the following: the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.
- [IDAPA 58.01.01.405.01, 5/1/94]
- 2.4 Unless specified elsewhere in this permit, the permittee shall conduct a quarterly facility-wide inspection of potential sources of fugitive emissions, during daylight hours and under normal operating conditions, to ensure that the methods used to reasonably control fugitive emissions are effective. If fugitive emissions are not being reasonably controlled, the permittee shall take corrective action as expeditiously as practicable. The permittee shall maintain records of the results of each quarterly fugitive emissions inspection. The records shall include, at a minimum, the date of each inspection and a description of the following: the permittee's assessment of the conditions existing at the time fugitive emissions were present (if observed), any corrective action taken in response to the fugitive emissions, and the date the corrective action was taken.
- [IDAPA 58.01.01.405.01, 5/1/94]

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Odors

- 2.5 No person shall allow, suffer, cause, or permit the emissions of odorous gases, liquids, or solids to the atmosphere in such quantities as to cause air pollution.
[IDAPA 58.01.01.775-776, 5/1/94]
- 2.6 Unless specified elsewhere in this permit, the permittee shall maintain records of all odor complaints received. If the complaint has merit, the permittee shall take appropriate corrective action as expeditiously as practicable. The records shall include, at a minimum, the date each complaint was received and a description of the following: the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.
[IDAPA 58.01.01.405.01, 5/1/94]

Visible Emissions

- 2.7 No person shall discharge any air pollutant to the atmosphere from any point of emissions for a period or periods aggregating more than three minutes in any 60-minute period which is greater than 20% opacity as determined by procedures contained in IDAPA 58.01.01.625. These provisions shall not apply when the presence of uncombined water, nitrogen oxides, and/or chlorine gas are the only reason(s) for the failure of the emissions to comply with the requirements of this section.
[IDAPA 58.01.01.625, 5/1/94]
- 2.8 Unless specified elsewhere in this permit, the permittee shall conduct a quarterly facility-wide inspection of potential sources of visible emissions during daylight hours and under normal operating conditions. The visible emissions inspection shall consist of a see/no see evaluation for each potential source. If any visible emissions are present from any point of emission, the permittee shall either take appropriate corrective action as expeditiously as practicable, or perform a Method 9 opacity test in accordance with the procedures outlined in IDAPA 58.01.01.625. A minimum of 30 observations shall be recorded when conducting the opacity test. If opacity is greater than 20% for a period or periods aggregating more than three minutes in any 60-minute period, the permittee shall take all necessary corrective action and report the exceedance in its annual compliance certification and in accordance with IDAPA 58.01.01.130-136. The permittee shall maintain records of the results of each quarterly visible emissions inspection and each opacity test when conducted. The records shall include, at a minimum, the date and results of each inspection and test and a description of the following: the permittee's assessment of the conditions existing at the time visible emissions are present (if observed), any corrective action taken in response to the visible emissions, and the date corrective action was taken.
[IDAPA 58.01.01.405.01, 5/1/94]

Excess Emissions

- 2.9 The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130-136 for excess emissions due to startup, shutdown, scheduled maintenance, safety measures, upsets, and breakdowns.
[IDAPA 58.01.01.130-136, 4/5/00]

Open Burning

- 2.10 The permittee shall comply with the requirements of IDAPA 58.01.01.600-616, *Rules for Control of Open Burning*.
[IDAPA 58.01.01.600-616, 5/1/94]

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Air Stagnation Advisory Days

- 2.11 The permittee shall comply with the Air Pollution Emergency Rules in IDAPA 58.01.01.550-562.
[IDAPA 58.01.01.550, 5/1/94]

Monitoring and Recordkeeping

- 2.12 The permittee shall maintain sufficient recordkeeping to assure compliance with all of the terms and conditions of this operating permit. Records of monitoring information shall include, but not be limited, to the following: (a) the date, place, and times of sampling or measurements; (b) the date analyses were performed; (c) the company or entity that performed the analyses; (d) the analytical techniques or methods used; (e) the results of such analyses; and (f) the operating conditions existing at the time of sampling or measurement. All monitoring records and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes, but is not limited to, all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. All records required to be maintained by this permit shall be made available in either hard copy or electronic format to Department representatives upon request.

[IDAPA 58.01.01.405.01, 5/1/94]

Reports and Certifications

- 2.13 Any reporting required by this permit, including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certifications, shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete. Any reporting required by this permit shall be submitted to the following:

Air Quality Permit Compliance
Department of Environmental Quality
Coeur d'Alene Regional Office
2110 Ironwood Parkway
Coeur d'Alene, ID 83814
Phone (208) 769-1422
FAX (208) 769-1404

[IDAPA 58.01.01.123, 5/1/94; IDAPA 58.01.01.405.01, 5/1/94]

Obligation to Comply

- 2.14 Receiving a permit shall not relieve any owner or operator of the responsibility to comply with all applicable local, state, and federal rules and regulations.

[IDAPA 58.01.01.406, 5/1/94]

Fuel-Burning Equipment

- 2.15 The permittee shall not discharge to the atmosphere from any fuel-burning equipment particulate matter in excess of 0.015 gr/dscf of effluent gas corrected to 3% oxygen by volume for gas, 0.050 gr/dscf of effluent gas corrected to 3% oxygen by volume for liquid, 0.050 gr/dscf of effluent gas corrected to 8% oxygen by volume for coal, and 0.080 gr/dscf of effluent gas corrected to 8% oxygen by volume for wood products.

[IDAPA 58.01.01.676-677, 5/1/94]

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3. PRE-EXPANDER, PREPUFF STORAGE, MOLDING, AND PRODUCT STORAGE

3.1 Process Description

The EPS raw material (beads) arrives in 1,000-pound boxes. The beads are vacuum fed to the pre-expander where they are partially expanded to their desired density using steam from a natural gas-fired boiler to heat the beads to release pentane, which is the encapsulated blowing agent contained in the beads. The expanded beads are then aged in prepuff storage for 2 to 48 hours to allow the prepuff to stabilize. The material is then transferred to molds where, using steam, the beads are fused together into shapes created by the forms. The forms are then cut to the final shape and stored. Each step of the process results in pentane emissions.

3.2 Control Description

There are no emissions controls for these processes.

Emissions Limits

3.3 Emissions Limits

The combined VOC emissions from the pre-expander, the 24 hours of prepuff storage, molding, the first 24 hours after molding, and the second 24 hours after molding, shall not exceed 2,856 lb/day or 95.2 tons per any consecutive 12-month period.

[IDAPA 58.01.01.401.01, 4/5/00; IDAPA 58.01.01.211.01, 5/1/94]

Operating Requirements

3.4 Throughput Limits

The maximum daily throughput of the pre-expander shall not exceed 48,000 lb/day. The maximum annual throughput of the pre-expander shall not exceed 3,200,000 pounds per any consecutive 12-month period.

[IDAPA 58.01.01.401.01, 4/5/00; IDAPA 58.01.01.211.01, 5/1/94]

3.5 Pentane Limit

The permittee shall not expand EPS beads that contain pentane greater than 7% by weight.

[IDAPA 58.01.01.401.01, 4/5/00]

Monitoring and Recordkeeping Requirements

3.6 Monitor Operating Parameters

A compilation of the most recent five years of records shall be kept on site and shall be made available to Department representatives upon request. The permittee shall monitor and record the following information:

- The throughput of EPS beads in pounds per day and pounds per the most recent 12-month period.
- Documentation for each purchase of EPS beads that shows the percent pentane by weight of the beads.

[IDAPA 58.01.01.401.01, 4/5/00]

AIR QUALITY TIER II OPERATING AND PERMIT TO CONSTRUCT No.: 055-00047

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Location: Post Falls, Idaho

Date Issued: December 10, 2002
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4. SUMMARY OF EMISSIONS RATE LIMITS

The following table provides a summary of all emission rate limits required by this permit:

Table 4.1 SUMMARY OF ALL EMISSIONS RATE LIMITS IN THE PERMIT

Foam Molders Inc., Post Falls		
Emissions Limits^a – Daily (lb/day), and Annual^b (T/yr)		
Source Description	VOC	
	lb/day	T/yr
Pre-expander, prepuff storage, molding (first 24-hours), and product storage (second 24-hours after molding)	2,856	95.2

^a As determined by a pollutant-specific EPA reference method, a Department-approved alternative, or as determined by the Department's emissions estimation methods used in this permit analysis.

^b As determined by actual annual production rates.

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5. FACILITY-WIDE EMISSIONS INVENTORY

The emissions inventory table includes all potential emissions from all sources at the facility. The emissions inventory table is provided for informational purposes only.

Table 5.1 EMISSIONS INVENTORY BASED ON PTE

Foam Molders Inc., Post Falls										
Potential Emissions* - Hourly (lb/hr), and Annual (T/yr)										
Source Description	PM₁₀		NO_x		CO		VOC		SO₂	
	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
Boiler, Superior, 6.32 MMBtu/hr natural gas	0.05	0.20	0.60	2.63	0.50	2.21	0.03	0.14	0.004	0.02
EPS expansion, molding, and storage							119	95.2		
Total	0.05	0.20	0.60	2.63	0.50	2.21	119	95.34	0.004	0.02

* As determined by a pollutant-specific U.S. EPA reference method, a Department-approved alternative, or as determined by the Department's emissions estimation methods used in this permit analysis.

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6. GENERAL PROVISIONS

1. All emissions authorized herein shall be consistent with the terms and conditions of this permit. The emission of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit and the *Rules for the Control of Air Pollution in Idaho*, and the Environmental Protection and Health Act, Idaho Code 39-101 et seq.
2. The permittee shall at all times (except as provided in the *Rules for the Control of Air Pollution in Idaho*) maintain and operate in good working order all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable laws for the control of air pollution.
3. The permittee shall allow the Director, and/or his authorized representative(s), upon the presentation of credentials:
 - To enter upon the permittee's premises where an emissions source is located, or in which any records are required to be kept under the terms and conditions of this permit; and
 - At reasonable times, to have access to and copy any records required to be kept under the terms and conditions of this permit, to inspect any monitoring methods required in this permit, and to require stack emissions testing (i.e., performance tests) in conformance with state-approved or accepted EPA procedures when deemed appropriate by the Director.
4. Except for data determined to be confidential under Section 9-342A *Idaho Code*, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the appropriate regional office of the Department of Environmental Quality.
5. Nothing in this permit is intended to relieve or exempt the permittee from compliance with any applicable federal, state, or local law or regulation, except as specifically provided herein.
6. In the event of any change in control or ownership of source(s) from which the authorized emissions emanate, the permittee shall notify the succeeding owner or controller of the existence of this permit by letter; a copy of which shall be forwarded to the Director.
7. This permit shall be renewable on the expiration date, provided the permittee submits any and all information necessary for the Director to determine the amount and type of air pollutants emitted from the equipment for which this permit is granted. Failure to submit such information within 60 days after receipt of the Director's request shall cause the permit to become void.
8. The Director may require the permittee to develop a list of operation and maintenance procedures to be approved by the Department. Such list of procedures shall become a part of this permit by reference, and the permittee shall adhere to all of the operation and maintenance procedures contained therein.
9. The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.